



Quality of Care and Outcomes Assessment

REVASCULARIZATION OF VIABLE MYOCARDIUM INSIGHTS FROM META-ANALYSES OF RANDOMIZED CLINICAL TRIALS AND RECENT NON-RANDOMIZED STUDIES ON THE EFFECT ON ALL CAUSE MORTALITY USING TRIAL SEQUENTIAL ANALYSES AND META-REGRESSION ANALYSIS

Poster Contributions

Poster Sessions, Expo North

Sunday, March 10, 2013, 9:45 a.m.-10:30 a.m.

Session Title: Improving Heart Failure Outcomes II

Abstract Category: 28. Quality of Care and Outcomes Assessment

Presentation Number: 1200-98

Authors: Saurav Chatterjee, Partha Sardar, Jørn Wetterslev, Giuseppe Biondi-Zoccai, Debabrata Mukherjee, Brown University and the Providence VAMC, Providence, RI, USA, Texas Tech University Health Sciences Center, El Paso, TX, USA

Background: The utility of revascularization of viable myocardium in patients with ischemic cardiomyopathy is controversial.

Methods: A systematic search of studies published between 1999 and March, 2012 was conducted using MEDLINE, EMBASE, CINAHL, Scopus, the Web of Science and Cochrane CENTRAL databases. Management strategies based on myocardial viability status, and all-cause mortality rates at the longest available follow-up for the individual study, were abstracted. Pooled-effect estimates were calculated with random-effects models.

Results: Analysis of revascularization of viable myocardium revealed significantly improved all cause mortality in observational studies with a relative risk (RR) of 0.35 (95% CI 0.26-0.48). The mortality benefit was corroborated in findings from the analysis of RCTs, RR 0.78 (95% 0.63-0.97), not to the same extent, but persisted even after statistical adjustments and interaction testing ($p=0.0009$). Sequential analyses reinforced our findings. Stress echocardiography and nuclear imaging guided assessment of viability status and subsequent revascularization appears to have comparable improvement in mortality.

Conclusions: A strategy of revascularization in patients with viable myocardium and ischemic cardiomyopathy appears to decrease all-cause mortality.

